



NATIONAL PARK SERVICE

Environmental Audit Program

EnviroCheck Sheet

Air Quality Management
June 2002 Update

AIR QUALITY MANAGEMENT

Air quality issues have become a significant concern in parks due to the decline in visibility and a decrease in overall air quality. Two of the most well known examples can be found at the Grand Canyon, where a reduction in visibility due to western emission sources has become a significant issue, and Yosemite, where a new transportation system is being installed partially to improve air quality in Yosemite Valley. Poor local air quality can also be a human health and safety concern. Pollutants, such as airborne asbestos, improperly vented exhaust from generators or boilers, and, particulate emissions from dusty roads and woodshops, can impact the health of park employees and visitors.

Many man-made operations and naturally occurring processes at NPS facilities create air emissions that are regulated on a federal, state, or local level. The following may generate emissions requiring regulation at National Park Service (NPS) facilities:

- Surface coating operations such as painting of sign, vehicles, structures, and roadways;
- Vehicle and equipment operation and refueling;
- Combustion operations such as boilers, furnaces, and prescribed burns;
- Use of solvent in cleaning and degreasing operations;
- Dust sources such as non-paved roads, sandblasting, and woodworking;
- Waste disposal operations such as landfills, incinerators, or open burning;
- Natural sources such as dust storms and wild fires;
- Storage piles and unpaved roads; and
- Welding, air conditioning, and refrigeration system operation and servicing.

Management requirements related to these emissions may include:

- Creating an inventory of park air emission sources;
- Obtaining air permits to construct and operate certain equipment;
- Installing and properly operating air pollution control equipment;
- Monitoring air pollution equipment; and
- Preparing and implementing contingency plans to control air emissions in regions of poor air quality.

Auditor Guidelines:

Records to Review

- State and local air pollution control regulations
- Air permits and other authorizations
- Chemical inventory
- Air Emissions Inventory
- Emission monitoring reports
- Notice of Violations from regulatory authorities

Features to Observe

- Painting operations
- Large furnaces, boilers and incinerators
- Auto shop parts cleaning
- Maintenance shop parts cleaning operations
- Unpaved roads and storage piles
- Welding and sandblasting units
- Wastewater treatment plants and landfills
- Pollution control devices
- Other identified air emission sources at the park
- Park air quality monitoring station

Staff to Contact

- CFC technician
- Auto mechanic
- Building and Utilities staff
- Rangers involved in park air quality monitoring
- Rangers managing prescribed burning

DEFINITIONS

NOTE: Definitions are not in alphabetical order; they are grouped according to subject matter.

Air emission source: Any facility that emits air pollutants. Air emission sources may be either stationary or mobile (e.g., cars and trucks). Source categories are classified as major or minor sources.

Stationary source: A place or object from which pollutants are released and which does not move around (e.g., gas stations, incinerators, houses).

Permit: A document that resembles a license, required by the Clean Air Act (CAA) for large (“major”) sources of air pollution, such as power plants, chemical factories and, in some cases, smaller polluters. Usually permits are issued by state and local air agencies. If EPA has disapproved all or part of a state or local permit program, however, EPA will act as the permitting agency in that state or area. Permits include information on which pollutants are being released, how much the source is allowed to release, and the program that will be used to meet pollutant release requirements. Permits are required both for the operation of entire facilities (operating permits) and for the construction of new plants or modification of existing plants (new source review permits).

Title V: Section of the 1990 Clean Air Act Amendments required all major, and some minor, sources of air pollution to obtain an operating permit. A Title V permit, as the permits are known, grants permission for the source to be operated. The permit includes all air pollution requirements that apply to the source, including emissions limits, monitoring, record keeping, and reporting requirements. It also requires that a report regarding the compliance status of the source, with respect to permit conditions, be made to the permitting authority.

Major source: “Major” is a term used to determine the applicability of permitting regulations to specific sources. What constitutes a major source varies according to what type of permit is involved, the pollutant(s) being

emitted, and the attainment designation of the area where the source is located. In general, a source is regarded as major if its emissions exceed certain thresholds defined in tons per year. For example, under Title V of the Clean Air Act, any source that emits, or has the potential to emit, 100 tons per year or more of any criteria air pollutant is a major source and must obtain a Title V operating permit.

Minor source: Facilities whose total potential air emissions are below established major source thresholds.

Potential to Emit (PTE): The maximum capacity of a stationary source to emit under its physical and operational design (e.g., operating 24 hours a day, 365 days a year, at maximum capacity). Many permitting requirements are triggered by a source's PTE rather than actual emissions.

Synthetic minor sources: Air emission sources that have the physical and operational capability to emit major amounts, but are not considered major sources because the owner/operator has accepted an enforceable limitation. Many sources have the *capacity* to emit major amounts of air pollutants, but *actually* emit amounts that are much lower than the major source threshold. For such sources, states and local permitting agencies provide opportunities to obtain limits on their potential to emit through construction permit programs, operating permits, general permits applicable to multiple sources, State implementation plans (SIP), and other mechanisms.

Federally Enforceable State Operating Permit (FESOP): Often called a synthetic minor permit, FESOPs are issued by authorized states and institute federally enforceable limitations on the operations of a facility that would otherwise meet the emission thresholds of a major source. For instance, if a facility's *potential* emissions are calculated based on emissions from operating 24 hours a day, 7 days a week, 365 days a year, the FESOP may require that the facility *actually* operate from 9 to 5 Monday through Friday.

Actual Emissions: Those produced from an air emission source as a direct result of the operation. For example, if, during the year, an emergency generator was test-run one hour a week (52 hours) and two full days (48 hours) during an emergency, the *actual* emissions are those calculated for the 100 hours during which the equipment was operated.

Emission units: All individual pieces of equipment that emit air pollutants at a stationary source. EPA regulations define an emissions unit as any part of a stationary source that emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act. Examples of common emissions units include Stationary Internal Combustion Engines, Boilers or Steam Generators, Combustion Turbines, Printing Presses, Solvent Degreasers, and Paint Spray Booths. Individual emission sources may require a permit, even if Title V permitting requirements are **not** triggered.

Fugitive emissions: Emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening (e.g., dust from an unpaved road, volatile organics from outdoor painting). These emissions may need to be included in emission inventories. There may be control requirements for some of these sources.

Criteria pollutants: Six major pollutants (carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, particulate matter, and lead) for which EPA has set ambient air quality standards. These pollutants are emitted from a variety of NPS sources including boilers, generators, tanks, woodshops and sandblast operations, wastewater treatment plants and others. Criteria pollutant levels are considered in determining the applicability of certain permitting requirements.

Hazardous Air Pollutants (HAPs): Pollutants that are known or suspected to cause cancer or other serious health effects (i.e., reproductive effects or birth defects) or adverse environmental effects. EPA, working with state and local governments, is establishing standards to reduce emissions of 188 HAPs. Those standards are known by the

acronym NESHAPs (National Emission Standards for Hazardous Air Pollutants). HAPs found at NPS facilities may include asbestos, chlorine, formaldehyde, methanol and methyl ethyl ketone. HAP emission levels are considered in determining permit applicability to construct and operate equipment and conduct certain activities. Certain pollution control equipment may also be mandated for equipment that emits these pollutants.

National Emission Standard for Hazardous Air Pollutants (NESHAP): A technology-based standard of performance prescribed for HAPs from certain stationary source categories under Section 112 of the Clean Air Act.

New Source Performance Standard (NSPS): An emission standard prescribed for criteria pollutants from certain stationary source categories under Section 111 of the Clean Air Act.

National Ambient Air Quality Standards (NAAQS): Set of standards for pollutants considered harmful to public health and the environment. The Clean Air Act (CAA) established two types of NAAQS. *Primary* standards set limits to protect public health, including the health of “sensitive” populations such as asthmatics, children, and the elderly. *Secondary* standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. The EPA has set NAAQS for carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, particulate matter, and lead (as identified above).

Nonattainment Area: A geographic area in which the level of a criteria air pollutant is higher than the level allowed by the federal standards. A single geographic area may have acceptable levels of one criteria air pollutant but unacceptable levels for one or more other criteria air pollutants. Thus, an area could be both attainment and nonattainment at the same time. Permitting thresholds are generally lower and air pollution control equipment requirements are generally more stringent in non-attainment areas than those in areas of attainment. The most recent list of areas that are in non-attainment for any criteria pollutant is available at <http://www.epa.gov/oar/oaqps/greenbk>.

Class I Area: The EPA developed an air quality classification system that identifies geographic areas exhibiting categorical air quality characteristics. Class I Areas are pristine regions that impose development parameters implemented to prevent the degradation of air quality from increased air pollution. The Clean Air Act defines mandatory Class I Federal areas as certain national parks (over 6000 acres), wilderness areas (over 5000 acres), national memorial parks (over 5000 acres), and international parks that were in existence as of August 1977. For maps of NPS facilities and other wilderness areas designated as Class I Areas, go to <http://www.epa.gov/oar/vis/index.html>.

LEGAL REQUIREMENTS

Federal

The Clean Air Act (CAA)

The Clean Air Act is the comprehensive federal law that regulates air emissions. This law authorizes the Environmental Protection Agency to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment.

The goal of the CAA was to set and achieve NAAQS in every state by 1975. The setting of maximum pollutant standards was coupled with directing the states to develop state implementation plans (SIPs) applicable to appropriate industrial sources in the state.

The Act was amended in 1977 primarily to set new goals (dates) for achieving attainment of NAAQS since many areas of the country had failed to meet the deadlines. The 1990 amendments to the Clean Air Act in large part were intended to meet unaddressed or insufficiently addressed problems such as acid rain, ground-level ozone, stratospheric ozone depletion, and air toxics. The CAA amendments of 1990 consist of several titles. Those most likely to apply to NPS facilities are summarized below.

Title I – Establishes States' Role in Controlling Emissions

Describes air pollution control requirements for geographic areas of the United States that fail to meet the NAAQS and requires states to adopt State Implementation Plans (SIPs) to comply with those standards. Title I also establishes the New Source Performance Standards (NSPS) which include technology-based standards for certain air emission sources, and a New Source Review (NSR) pre-construction permit program for new or modified air emission sources to control air quality related to criteria pollutants.

Title II – Establishes Mobile Source Regulations

The mobile source program outlines emission controls for motor vehicles including: tailpipe standards, use of clean fuels, and mandatory acquisition of clean-fuel vehicles. Title II guides NPS purchase of fuels and vehicles as well as vehicle maintenance and inspection procedures. The complexity of the mobile source program varies with the level of severity of non-attainment in the region. For instance, certain metropolitan areas are required to implement a Clean Fuel Fleet Program (CFFP) if the region does not meeting the federal air quality standards for ozone and carbon monoxide (the CFFP program is codified at 40 CFR 88).

Title III – Establishes Emission Standards

Title III is intended to controls HAPs by requiring emission control standards for certain new and existing air emission sources and by establishing National Emission Standards for Hazardous Air Pollutants (NESHAPS). Title III also requires pre-construction permitting for new or modified sources of emissions over certain levels and requires certain facilities to develop contingency plans for accidental releases.

Title V – Establishes Operating Permit Program

Authorizes an operating permit program intended to streamline the way federal, state, tribal, and, local authorities, regulate air pollution by consolidating all air pollution control requirements into a single, comprehensive “operating permit” that covers all aspects of a source’s year-to-year air pollution activities.

Title VI – Requires Phase-Out of Ozone Depleting Substance

Protects stratospheric ozone by restricting the production and use of chlorofluorocarbons (CFC), halons, and other halogenated solvents. A variety of requirements applicable to equipment and technicians working on air conditioning and refrigeration equipment and halon fire suppression equipment apply as a result of Title VI. This element of the CAA is discussed in detail in the CFC Management check sheet.

Regional Haze Rule

The Clean Air Act amendments of 1977 included provisions for protecting visibility in parks and wilderness areas in the United States. Included was the requirement of making reasonable progress towards the national visibility goal of having no man-made visibility impairment in these parks and wilderness areas.

The Regional Haze Rule requires states to establish goals and develop long-term strategies to control and eliminate sources of pollutants within a zone surrounding Class I Areas. The rule will impact industry *outside* park boundaries. **From a compliance perspective, the Regional Haze Rule is unlikely to have an impact on park operations being audited.**

See “What the Parks should know about the EPA’s new Regional Haze Rule” at <http://www.aqd.nps.gov/ard/vis/rhr.html> for more information

Executive Order 13031 - Greening the Government: Federal Fleet and Transportation Efficiency

This EO requires each Federal agency to develop and implement plans to fulfill the alternative fueled vehicle (AFV) acquisition requirements established by the Energy Policy Act of 1992. The Act generally requires that, of the vehicles acquired by each agency for its fleets, 25 percent should be AFVs in fiscal year (FY) 1996, 33 percent in FY 1997, 50 percent in FY 1998, and 75 percent in FY 1999 and thereafter. These requirements apply to all agencies, regardless of whether they lease vehicles from the General Services Administration (GSA) or acquire them elsewhere.

The Department of the Interior and NPS are implementing strategic and action plans to meet the EO requirements.

State and Local

For NPS facilities, it is the state and local air regulations that will be most significant. Most states are authorized to administer federal air quality regulations. In some states, this responsibility is further delegated to a regional air quality authority.

State air regulations are required to follow federal guidelines and therefore will have similar features. However, state regulations can be more stringent and, therefore, must be consulted before performing an audit. For instance, Title V permitting requirements usually apply to industrial activities that emit substantially more pollutants than the average NPS facility. However, state thresholds triggering a permit may be much lower (i.e., their definition of a “major” source may differ from federal regulations), increasing the possibility that park activities may trigger permitting requirements. In addition, states often have pre-construction permit/registration programs for equipment even if they do not meet the federal pre-construction permit requirements.

States will usually have general permit requirements for single emission units, such as paint booths. Other state or local regulations may control activities such as:

- Open and controlled burning and firefighter training;
- Vapor control for fuel storage tanks;
- Motor vehicle emissions and inspections;

- Opacity monitoring and fugitive dust control; or
- Accidental release risk management planning and air episode planning.

The auditor must contact the state prior to the audit visit to determine state-specific requirements. When asking questions of a state representative, it should be clarified that the operations are being conducted at a federal facility. Questions to ask may include:

- Do the state's Title V and permitting requirements differ from EPA's? If so, how?
- Does the state require general/individual air emission source permits/registrations for [*refer to individual emission sources and air pollution control equipment at the park, such as painting operations*]?
- Does the state require the submission of an emissions inventory?

For a list of state and local regulatory authorities, go to the US EPA Office of Air & Radiation Government Partners web page at <<http://www.epa.gov/air/partners.html>>. **Before contacting the state, determine if the park has already answered any of these questions.**

COMPLIANCE REQUIREMENTS

Emissions Inventory

In order to understand applicable air compliance requirements, park personnel need to have an accurate baseline emissions inventory for the park. This inventory should identify all the air emission units including information on equipment size, age, pollution control equipment and permit status as well as actual and potential emissions. The baseline assessment should be updated whenever there is a significant operational or equipment change that could impact regulatory applicability.

Annual emission inventories are required for major sources. In addition, some states require emission inventories on an annual basis for the entire park, or, individually permitted air emission sources.

Emission Controls for Stationary Equipment or Operations

Federal, state or regional emission control requirements may exist for parks. Emission controls may include required equipment such as cyclones or bag houses to control particulate emissions for woodshops, filters to control particulate emissions from paint spray booths, or vapor controls for fuel storage tanks. Material usage controls may be required such as VOC limits for paints used at the park. Operational controls may also be mandated, such as the requirement to close the lid of a solvent dip tank when it is not being used. Further description of these compliance requirements follows.

Emission Standards Under the NSPSs and NESHAPs

The NSPS (40 CFR 60) establishes technology-based standards of performance for specific new and modified sources of emissions. Such sources may include, steam generating units, boilers, incinerators, surface coating operations, and certain residential wood heaters. However, auditors must keep in mind that many of the NSPS emission standards for such units apply to the *manufacturer* of the equipment, not the *user*. Within each source category the EPA identifies specific pollutants and sets emission standards for those pollutants. Potentially applicable categories at parks include landfills, steam boilers, surface coating of vehicles or furniture, fuel storage tanks, new residential wood heaters, and others.

The NESHAPs program (40 CFR 61 and 63) regulates both specific hazardous air pollutants (HAPs) and HAP air emission sources. EPA regulates 188 HAPs, including asbestos, benzene, formaldehyde, toluene and methylene chloride. NESHAP standards are in place for certain boilers, stationary internal combustion engines, landfills, surface coating of vehicles and metal furniture, and incinerators of certain size. The standards apply to new, modified and existing sources. Compliance with the NESHAPs can be onerous. If a park's activity does trigger a NESHAP, appropriate staff should be provided with information regarding how to eliminate the use of the regulated substances or activity (e.g., find substitutes for halogenated solvents).

Before any stationary emission source is constructed or modified, park personnel need to check with state and local regulators to determine if the new source or modification to a current source triggers NSPS or NESHAP technology requirements. Park personnel also need to be aware of any NESHAPs that are in place or that are promulgated for existing sources.

Other State or Locally Mandated Controls

Other equipment, material usage or operational controls may be required to control stationary source emissions under state or local regulatory programs. Controls may include those for equipment such as particulate emissions from woodshops, VOC emissions from service stations, or visible emissions from combustion sources.

NPS facilities create "fugitive emissions" from such sources as dust from unpaved roads, construction activities, tilling soil and bulk material storage such as gravel and mining operations regulated under NPS authority. Fugitive dust emissions can be minimized by wetting or watering (parks should not use oil to wet dirt roads) and installing windbreaks or enclosures (for storage piles such as gravel). Some states may *require* these controls. In all locations, NPS facilities should implement these measures as BMPs.

Permits and Other Air Emission Authorizations

Pre-construction Permits.

Pre-construction permit requirements are required for many types of equipment or operations. Federal pre-construction permit requirements exist for new and existing air emission sources that have the potential to exceed certain emission levels of criteria pollutants or HAPs. For criteria pollutants, in non-attainment areas, this program is called New Source Review (NSR). In attainment areas it is called Prevention of Significant Deterioration (PSD). For HAPs this program is administered under the NESHAPs program.

These permit programs are administered by the state or regional agency if they are authorized. States or regional authorities may also have additional pre-construction or registration requirements for new equipment or operations even if they do not trigger one of the federal program requirements. Park personnel should notify the state or local regulators before they begin new construction, or modification of existing stationary equipment that will have emissions, to determine if pre-construction permits are required.

Operating Permits

Major sources are required to obtain a Title V operating permit. Title V permits are often called part 70 permits because the regulations that establish minimum standards for state permit programs are found in the Code of Federal Regulations at 40 CFR part 70. Title V operating permits specify emission levels for an entire facility. Upon completion of the park's air emission inventory, park personnel should determine if their total potential emissions trigger any operating permit requirements.

General or Individual Permits

States or regional authorities may require general permits for minor sources, or, for individual pieces of equipment. General permits may also be necessary if a facility's *potential* emissions trigger Title V permitting

requirements, but their *actual* emissions are below the trigger. Upon completion of the park's air emission inventory, park personnel should determine if they trigger any permit requirements for any individual air emission source.

Other Authorizations.

Other authorization from the state or regional authority may be required for activities that are not continuous, such as open burning. Open burning may include burning leaves, tree branches, setting campfires, prescribed burning in wooded areas, firefighter training, clearing lands for rights-of-way, and, game management. NPS personnel should have documentation demonstrating contact with state regulators prior to open burning to assess any regulatory restrictions or permit requirements. In addition, time-restrictions, bans on burning certain substances (e.g., roof shingles), and, weather conditions, may affect open burning procedures.

Asbestos Management

Asbestos is managed under the NESHAP program. In addition, since it has the potential to become airborne through building renovations and demolition activities, many states regulate the removal and disposal of asbestos-containing materials. Park requirements include, but are not limited to:

- Provide proper notification for asbestos demolition and renovation activities;
- Record the location of asbestos-containing material on the Facility deed;
- Inspect the facility for presence of asbestos prior to starting demolition/renovation; and
- Deposit all asbestos containing waste material (ACWM) as soon as practical at an approved/properly-operated site.

Park personnel should contact the state or regional regulatory agency to determine specific air pollution control and other requirements related to asbestos management, prior to any renovation or demolition.

CFC Management

Regulations control the management of ozone-depleting chemicals (ODC) from equipment (e.g., appliances, air conditioners and fire-suppression equipment). Products manufactured using ODC must meet labeling requirements. (CFC requirements are dealt with specifically in the CFC and Halons EnviroCheck Sheet.)

Vehicle and Transportation Operations

Air emissions from vehicles, and transportation operations including fueling and maintenance, are regulated by federal, state, and, local restrictions. Most regulations applicable to mobile sources of air emissions apply to vehicle manufacturers or gasoline refineries. Following are examples of regulations that may apply to vehicle *operators* at NPS facilities:

Clean Fuel Fleet Program

The Clean Fuel Fleet Program (CFFP) requires fleets to acquire lower-polluting vehicles certified to emissions standards that are more stringent than the standards in effect for the general vehicle population. Vehicles certified to the CFFP standards are over 70% cleaner than the vehicles certified to the current "base" federal standard.

Fleet vehicles that operate in areas of nonattainment for ozone and carbon monoxide are required to comply with the CFFP. The CFFP covers all fleets, including government and private fleets, of 10 or more (non-exempt) vehicles located in the *covered area*. The areas currently covered by the CFFP are Atlanta, Washington, DC

metropolitan area, Chicago-Gary-Lake Counties, Milwaukee-Racine, Baton Rouge, and Denver-Boulder. Covered states are required to revise and submit to EPA their SIPs to include the CFFP.

There are four applicability criteria that determine whether a fleet is subject to the program:

1. The fleets must contain of 10 or more vehicles.
2. At least 10 vehicles are located and/or “primarily operated” in the covered area.
3. Affects only vehicles that are **new** to the fleet and are not exempt.
4. Affects vehicles that can be refueled at a central refueling site or at a usual set of retail or commercial sites. The program also affects vehicles that have an average roundtrip of less than 300 miles that may or may not exhibit a refueling pattern.

Exempt vehicles include military, law enforcement and emergency vehicles.

A clean fuel vehicle (CFV) meeting the CFFP standard is one that is certified by the manufacturer, or converter, to meet one of the following EPA vehicle emission standards:

- Low Emission Vehicle (LEV)
- Inherently Low Emission Vehicle (ILEV)
- Ultra-Low Emission Vehicle (ULEV)
- Zero Emission Vehicle (ZEV)

A listing of vehicles that are certified to NLEV (National Low-Emission Vehicle) standards is available at <http://www.epa.gov/otaq/cff.htm>.

Inspection and Maintenance

Many states have vehicle emission inspection programs that require testing to ensure tailpipe emissions do not exceed specified limits.

Catalytic Converters

Catalytic converters reduce the quantity of nitrogen oxides, carbon monoxide, and hydrocarbons emitted from vehicles. EPA regulations ensure that the upkeep and maintenance of vehicle catalytic converters are standardized and recorded.

Gasoline Dispensing

Vehicle fueling operations can produce air emissions during dispensing, re-filling of fuel storage tanks, and spills during either of those processes. In non-attainment areas, gasoline-dispensing facilities must use special equipment to minimize the release of emissions into the air.

Risk Management Plans

The EPA promulgated regulations requiring facilities that store greater than a threshold quantity (TQ) of certain hazardous substances to assess the hazards from accidental releases, and develop a release prevention program and an emergency response plan. The applicability of the regulation depends on the quantity of designated or flammable chemicals stored, used, or handled in a discrete process. The EPA initially designated 77 toxic chemicals and 63 flammable chemicals as regulated substances under the Risk Management Program (40 CFR 68.130 lists all chemicals). The threshold quantities for the flammable substances are 10,000 pounds and range from 500 to 20,000 pounds for toxic substances.

It is unlikely that normal operations at an NPS facility will trigger the risk management plan (RMP) requirements (especially since the EPA removed flammable fuels, such as propane, from the reporting process.) Chlorine, often found in water treatment operations, may trigger the RMP requirements, however, if found in sufficient quantity.

If a park does trigger the RMP requirement, park staff should be encouraged to reduce or eliminate the substance triggering the requirement.

General Duty Clause (GDC)

Section 112(r)(1) of the CAA amendments of 1990 requires owners of facilities that have regulated and extremely hazardous substances (EHS) to be responsible for ensuring the chemicals are handled in a safe manner. Unlike the RMP, the GDC does not have a threshold, and applies to any stationary source producing, processing, handling or storing, a regulated substance or EHS. Facilities subject to the GDC are responsible for

- Knowing the hazard associated with the chemicals and the possible impacts due to a release;
- Following standards and other business practices to ensure chemicals are managed safely; and
- Having a contingency planning process that includes community responders to assist in an accident.

POLLUTION PREVENTION

- Eliminate use of halogenated parts cleaning solvents.
- Consider using chlorine pellets, liquid, or alternative methods to treat drinking water and wastewater to reduce, or eliminate, the use of chlorine gas.
- Encourage limited use of motorized equipment on hot summer days. Only allow use of equipment during early morning or late evening hours.
- Encourage users to fuel vehicles after dark on warm, sunny days.

FOR MORE INFORMATION

- EnviroCheck Sheets: EnviroCheck Sheets regarding CFCs and Halons and Paints and Solvents provide more information on process-specific check sheets.
- NPS Fuel Storage Management Handbook.
- For information on air toxics, the ozone layer, urban air, vehicles and engines, visibility, regulations, policy, airlinks and the TTN Web go to the Office of Air and Radiation at <<http://www.epa.gov/oar/oarhome.html>>.
- For federal air regulations: <<http://www.epa.gov/epahome/cfr40.htm>>.
- Air quality information for the NPS: <<http://www.aqd.nps.gov>>.



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Environmental Audit Program

EnviroCheck Sheet

*Air Quality Management
June 2002 Update*

Many of the questions on this check sheet apply only to NPS facilities that conduct activities having emissions of specific regulated substances at or above certain thresholds or from specific sources. Regulated emissions include hazardous air pollutants (e.g., one of the substances or sources of emission listed under 40 CFR 61 and 63, such as benzene, chlorine or methyl ethyl ketone) or "criteria pollutants" (e.g., carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, particulate matter, or lead).

Most parks do not have regulated air emission sources that will trigger federal requirements. To effectively address this topic area, auditors should assess the following questions before the audit site visit. Information provided in the pre-visit questionnaire should be used to determine which questions are applicable. If the following questions do not apply to a park's operations, air regulations addressed under the "CFC and Halon Management" and "Paints and Solvents" check sheets may still apply.

CHECKLIST ITEM	PRIORITY	NOTES
<i>Air Emissions</i>		
1. Documentation is maintained indicating park staff is aware of state regulations applicable to emissions sources at the park. [BMP]	3	
2. Park staff maintains a current inventory of air emission sources that includes individual emission units and emission location and type. Examples of activities or operations that could trigger federal, state or local regulatory requirements include, but are not limited to: <ul style="list-style-type: none"> • Surface coating; • Paving; • Welding; • Boilers or incinerators; • Solvent dip tanks; • Sanding, sandblasting, grinding or other activities that could generate particle emissions; or • Open burning (e.g. of leaves, brush & debris). [BMP] <p>NOTE: An absence of an emissions inventory does not necessarily indicate non-compliance with air quality regulations. Auditors must first determine if there are emission units to inventory. After that, applicable federal, state and local requirements can be determined</p>	3	
3. A determination has been made regarding whether the total potential emissions listed in response to Question 2 trigger permitting requirements under Title V of the Clean Air Act or state or region requirements (if there is an authorized State/Region Implementation Program). [BMP related to 40 CFR 70]	3	
4. If Title V permitting requirements are triggered, the park has received and is operating under the appropriate state or federal permit, or park personnel have filed for a Federally Enforceable State Operating Permit. [40 CFR 70]	2	
5. If required, a general or individual permit is in place for equipment or activities identified in Question 2 (e.g., an incinerator, boiler, or paint booth operations) in accordance with state or regional regulatory requirements. [State regulations applicable to specific equipment/activities.]	2	

This document does not necessarily contain all information needed to determine compliance status.

CHECKLIST ITEM	PRIORITY	NOTES
6. The facility abides by state or local code regarding air quality restrictions (e.g., they do not burn trash if local code does not allow open burning or if, open burning is restricted to certain times of day or times of year, those restrictions are followed). [State or local code applicable to specific activities.]	2	
7. If the facility has a state or federal emissions permit (either a comprehensive operating permit or a general permit), the facility is adhering to stated emission limits, monitoring and reporting requirements and any other requirements stipulated in the permit. [Cite permit requirements, if applicable]	2	
8. A process is in place to ensure that authorization is obtained for air emissions operations that are not regularly conducted (e.g., prescribed burning, firefighter training, etc.). [BMP]	3	
Control of Criteria Pollutants		
9. If the NPS facility is located in a non-attainment area for any criteria pollutant, an initial emissions statement, identifying all sources that emit criteria pollutants, has been completed, and is updated annually with changes submitted to the state. [Required pursuant to CAA Section 182(a)(1) and (3), but implemented by individual state regulation.] NOTE: Auditors must determine if a facility is located in a non-attainment area before visiting the park. Do not assume that park staff will have knowledge of this requirement, particularly if it does not apply to them.	2	
10. Park staff is aware of their designation as a "Class I Area," if applicable, and any obligations they have to the state as a result of that designation. [BMP] NOTE: Auditor must determine if the park is a designated Class I Area before the audit (see http://www.epa.gov/oar/visibility/ for a complete list). Do not assume that park staff will have knowledge of this designation, particularly if it does not apply to them.	3	
11. Newly purchased fleet vehicles meet the requirements of the Clean Fuel Program requirements, if applicable in the region in which the park located. [40 CFR 88]	2	
12. NPS-owned vehicles meet state or local maintenance and inspection requirements. [State or local code]	2	
Emission Standards and Air Pollution Controls <i>It is unlikely that NSPS (40 CFR 60) and NESHAP (40 CFR 61 and 63) requirements will apply to NPS operations. However, auditors should review the list of regulated sources to ensure that NPS operations identified in the Pre-Visit Questionnaire are not listed in those regulations.</i>		
<i>New Source Performance Standards (NSPS)</i> <i>NSPSs are a series of federal regulations that affect specific operations and pieces of equipment. The lists of NSPSs should be reviewed to determine if any park operations may trigger the requirements.</i>		
13. Emissions listed in response to Question 2 have been reviewed to determine if they are subject to any New Source Performance Standards (NSPS). [BMP]	3	
14. If the NSPS requirements are triggered, the facility meets applicable testing, monitoring, recordkeeping, reporting and other applicable requirements triggered by the operation [40 CFR 60; cite specific NSPS]	2	

This document does not necessarily contain all information needed to determine compliance status.

CHECKLIST ITEM	PRIORITY	NOTES
<p><i>National Emission Standards for Hazardous Air Pollutants (NESHAPS)</i> <i>NESHAP are a series of federal regulations that limit the use of certain hazardous air pollutants (HAPs)</i></p>		
15. Emissions listed in response to Question 2 have been reviewed to determine if they trigger state or federal emission standards for Hazardous Air Pollutants. [40 CFR 61 and 63]	3	
16. If a NESHAP is triggered, the facility meets applicable testing, monitoring, recordkeeping, reporting and other applicable requirements. [40 CFR 61 and 63; cite specific NESHAP]	2	
17. If park emissions triggered any NESHAP requirements, park staff investigated means to substitute materials or processes to eliminate the NESHAP applicability. [BMP]	3	
18. Prior to starting demolition/renovation activities, park staff inspects the facility for presence of asbestos. If asbestos is present, asbestos NESHAP requirements are met. [40 CFR 61.145(a)]	2	
Risk Management Planning		
<p>19. If any regulated substance listed under 40 CFR 68.130 is used or stored at the park above the threshold quantity:</p> <ul style="list-style-type: none"> • A risk management program has been developed; • A written summary of the risk management program (known as the “Risk Management Plan” or RMP) was prepared and submitted to the proper authorities; and • A process is in place to update and make required changes to the RMP. [40 CFR 68.138] <p>NOTE: It is unlikely that any park will use or store regulated substance above the RMP thresholds. Auditors should determine if this question could apply to park operations before the audit site visit.</p>	2	
20. If any regulated substance listed under 40 CFR 68.130 was used or stored at the park, in amounts above the threshold quantity, park staff investigated means to reduce quantities or substitute materials or processes to eliminate the requirements under this regulation. [BMP]	3	
<p>21. If any “extremely hazardous substances” are used or stored at the park, park staff:</p> <ul style="list-style-type: none"> • Have identified hazards that may result from accidental releases; • Maintain a safe facility; and • Minimize the consequences of releases when they occur. [Clean Air Act Section 112(r)(1)] <p>NOTE: This requirement is known as the “General Duty Clause,” meaning facilities have a general duty to operate in a safe manner. There is no specific corresponding regulatory citation related to the General Duty Clause. Also, the law does not specifically define an extremely hazardous substance.</p>	2	